IN THE CLAIMS:

The following is a complete listing of claims in this application.

1. (original) A method for assigning at least one sound class to a sound signal, characterized in that it comprises the following steps:

dividing the sound signal into temporal segments (**T**) having a specific duration,

extracting the frequency parameters of the sound signal in each of the temporal segments (**T**), by determining a series of values of the frequency spectrum in a frequency range between a minimum frequency and a maximum frequency,

assembling the parameters in time windows (**F**) having a specific duration greater than the duration of the temporal segments (**T**),

extracting from each time window (**F**), characteristic components,

and on the basis of the extracted characteristic components and using a classifier, identifying the sound class of the time windows (**F**) of the sound signal.

2. (original) A method as per claim 1, characterized in that it consists of extracting the sound signal into temporal segments (**T**), the duration of which is between 10 and 30 ms.

3. (original) A method as per claim 1, characterized in that it consists of extracting the frequency parameters using the Discrete Fourier Transform.

4. (original) A method as per claim 3, characterized in that is consists of providing an operation for transforming or filtering frequency parameters.

5. (original) A method as per claim 4, characterized in that it consists of producing a transformation of the identity type, average of two adjacent frequencies, or as per the Mel

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scale.

6. (currently amended) A method as per claim 4 ~~or 5~~, characterized in that it consists of assembling the frequency parameters in the time windows of a duration greater than 0.3 seconds and preferably between 0.5 and 2 seconds.

7. (original) A method as per claim 1, characterized in that it consists of extracting from each time window, characteristic components such as the average, the variance, the moment, the frequency monitoring parameter or the silence crossing rate.

8. (original) A method as per claim 7, characterized in that it consists of using one or more input characteristic components of the classifier.

9. (currently amended) A method as per claim 7 ~~or 8~~, characterized in that it consists of providing a standardization operation of the characteristic components.

10. (currently amended) A method as per ~~claims 7 and~~ claim 9, characterized in that the standardization operation ~~consists of~~ comprises:

for the average, the variance or the moment, searching for the component having the maximum value and dividing the other components by said maximum value,

for the frequency monitoring or the silence crossing rate, dividing each of said characteristic components by a constant fixed after experimentation in order to obtain a value between 0.5 and 1.

11. (currently amended) A method as per claim 1 ~~or 8~~, characterized in that it consists of using as a classifier, a neural network or the K-Nearest Neighbour.

12. (original) A method as per claim 11, characterized in that it consists of producing a sound signal training phase for the classifier.

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13. (currently amended) A method as per ~~one of claims 1 to 12~~ claim 1, characterized in that it consists of, using a classifier, identifying sound classes such as speech or music, men's voices or women's voices, characteristic moment or uncharacteristic moment of a sound signal, characteristic moment or uncharacteristic moment accompanying a video signal representing, for example, a film or a match.

14. (original) A method as per claim 13, characterized in that it consists of classifying the sound signal into music or into speech by using the average, variance, frequency monitoring and silence crossing rate parameters, followed by a standardization of the parameters while the time window is equal to 2 s.

15. (original) A method as per claim 13, characterized in that it consist of classifying the signal of a important moment or unimportant moment match by using the average and variance parameters, with a transformation as per the Mel scale without applying standardization of the characteristic components.

16. (original) A method as per claim 13, characterized in that it consists of identifying the strong moments in a sound signal of a match.

17. (original) A method as per claim 16, characterized in that it consists of using the identification of strong moments to create a match summary.

18. (original) A method as per claim 13, characterized in that it consists of identifying and monitoring the speech in a sound signal.

19. (original) A method as per claim 18, characterized in that it consists of identifying and monitoring the speech of a man and/or woman for the speech part of the sound signal.

20. (original) A method as per claim 13, characterized in

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that it consists of identifying and monitoring the music in a sound signal.

21. (original) A method as per claim 13, characterized in that it consists of determining if the sound signal contains speech or music.

22. (original) A method as per claim 13, characterized in that it consists of assigning a label for each time window assigned to a class.

23. (original) A method as per claim 22, characterized in that it consists of searching for labels for a sound signal.

24. (original) An apparatus for assigning at least one sound class to a sound signal, characterized in that it comprises:

means (**10**) for dividing the sound signal (**S**) into temporal segments (**T**) having a specific duration,

means (**20**) for extracting frequency parameters of the sound signal into each of the temporal segments (**T**),

means (**30**) for assembling the frequency parameters into time windows (**F**) having a specific duration greater than the duration of the temporal segments,

means (**40**) for extracting from each time window (**F**), characteristic components,

and means (**60**) for identifying the sound class of the time windows (**F**) of the sound signal on the basis of the characteristic components extracted and using a classifier.

25. (original) An apparatus as per claim 24, characterized in that the means (20) for extracting the frequency parameters use the Discrete Fourier Transform.

26. (currently amended) An apparatus as per claim 24 ~~or 25~~, characterized in that it comprises means (25) for providing an operation for transforming or filtering frequency parameters.

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27. (currently amended) An apparatus as per ~~one of claims 24 to 26~~ claim 24, characterized in that it comprises means (30) for assembling the frequency parameters in the time windows (F) of a duration greater than 0.3 seconds and preferably between 0.5 and 2 seconds.

28. (original) An apparatus as per claim 24, characterized in that it comprises as means (40) for extracting from each time window, characteristic components, means for extracting the average, the variance, the moment and the frequency monitoring parameter or the silence crossing rate.

29. (original) An apparatus as per claim 28, characterized in that it comprises characteristic component standardization means (45).

30. (original) An apparatus as per claim 24, characterized in that it comprises as classifier, a neural network or the K-Nearest Neighbour.

31. (original) An apparatus as per claim 24, characterized in that it comprises means (60) for identifying the sound classes such as speech or music, men's voices or women's voices, characteristic or uncharacteristic moment of a sound signal, characteristic or uncharacteristic moment accompanying a video signal representing, for example, a film or a match.

32. (original) An apparatus as per claim 24, characterized in that it comprises means for assigning a label for each time window assigned to a class.

33. (original) An apparatus as per claim 32, characterized in that it comprises means for searching for labels for a sound signal recorded in a database.

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